Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Carrier Current Systems, including Broadband over Power Line Systems	)	ET Docket No. 03-104
	)	
	)	
Amendment of Part 15 regarding new requirements and measurement guidelines for Access Broadband over Power Line Systems	)	ET Docket No. 04-37

Reply Comments of Thomas P. O'Brien, P.E.
Electrical Engineer

I respectfully submit my comments in reply to the comments[1] made by the National Telecommunications and Information Administration ("NTIA") in response to the *Notice of Proposed Rulemaking* in the above-referenced proceeding.

1. Under "BPL IS A WIN-WIN PROPOSITION TO THE EXTENT THAT EXISTING AND FUTURE POWER LINE NOISE PROBLEMS ARE REDUCED", on page 5 of the "NTIA Comments", NTIA notes that "[a]s in radio systems, the signal-to-noise power ratio ("S/N") at BPL receivers must exceed certain thresholds in order to achieve reliable transmission with the requisite throughput. If the noise power at the BPL receiver is unnecessarily high, the BPL signal levels also will have to be unnecessarily high. Reducing power line noise can enable reductions in BPL signal power such that operation near the field strength limit may not be needed. Most strong power line noise emissions span not only the frequencies of prime interest for BPL operations, but also many other radio frequencies at Medium Frequency (MF), High Frequency (HF), Very High Frequency (VHF), and lower Ultra High Frequency (UHF) bands not used by BPL (generally spectrum below 600 MHz). Thus, reducing power line noise should reduce certain interference risks, perhaps including risks at frequencies used by the BPL system. Moreover, deployment of BPL could increase the likelihood that problematic power line noise will be diagnosed and repaired." [Emphasis added by this commenter]

2. This is the kind of wishful thinking usually found in fairy tales and fantasy/science fiction. One of the major benefits touted by BPL equipment providers is that the number of "expensive truck rolls" (visits to a site by a high-skill crew). How is that economy to be attained if the power utility must make multiple expensive trips to clean up the BPL site before (or during) installation? Power utilities have a dismal track record, documented elsewhere in this proceeding, in cleaning up RFI problems. Moreover, the wording in the NTIA statement is full of warm and fuzzy "wish words":

[1] Comments of the National Telecommunications and Information Administration, June 4, 2004 ("NTIA Comments"), in ET Docket No. 04-37

"can enable", "may not be needed", "should reduce", "perhaps", "could increase the likelihood".

3. On page 6 of "NTIA Comments", the truth starts to come out: "This is not to say that NTIA expects there will be a net, nationwide reduction of interference risks; instead, NTIA believes there will be at least partial offsetting of the interference risks posed by BPL." Where is the "win-win" part of this? NTIA doesn't "expect" a net improvement, but "believes" there will be a partial offsetting. The net effect, then, by NTIA's admission, is an increase in interference risk.

4. I respectfully urge the Commission to ignore this bit of wishful thinking, hopeful though it is. It has been presented without even the slightest bit of engineering or economic analysis, and is therefore not appropriate for this proceeding.

Respectfully submitted,

By _____
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